

THE HEROES OF HEX – LOGIC SOLUTION

5 8 2      One digit is correct, and is in the right position.

5 2 1      Two digits are correct, but both are in wrong positions

2 9 8      Two digits are correct, but both are in wrong positions.

**Can't be 5. The first clue says the correct digit is in the right place. But the second clue says the correct numbers are in the wrong place. 5 can't obey both of these.**

~~5~~ 8 2

One digit is correct, and is in the right position.

~~5~~ 2 1

Two digits are correct, but both are in wrong positions

2 9 8

Two digits are correct, but both are in wrong positions.

If 5 is eliminated, then it means that 2 and 1 are correct digits according to the second clue. So we can eliminate 8, because the first clue says there's only one correct digit, and that's 2.

~~5~~ ~~8~~ 2 One digit is correct, and is in the right position.

~~5~~ 2 1 Two digits are correct, but both are in wrong positions

2 9 ~~8~~ Two digits are correct, but both are in wrong positions.  
**With 5 and 8 eliminated, 2 must be correct in the third position. 1 must be in the first or second position.**

Based on the third clue, 2 and 9 are in the code. We know 2 is in the third position. And 9 can't be in the second position. So 9 must be in the first position. and 1 must be in the second position. Correct answer: 912

~~5~~ ~~8~~ (2)

One digit is correct, and is in the right position.

~~5~~ 2 1  
←

Two digits are correct, but both are in wrong positions

2 9 ~~8~~  
←

Two digits are correct, but both are in wrong positions.